

REMARKS

Upon entry of the present amendment, claims 1-11 will have been canceled, and claims 12-48 will have been submitted for consideration by the Examiner.

Additionally, several paragraphs of the Disclosure will have been revised to eliminate informalities therefrom.

In view of the hereincontained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of each of the outstanding objections and rejections set forth in the above-mentioned Official Action of September 9, 2005. Such action is respectfully requested and is now believed to be appropriate and proper.

Initially, Applicants wish to respectfully thank the Examiner for acknowledging their claim for foreign priority under 35 U.S.C. § 119 and for confirming receipt of the certified copy of the foreign priority document. Additionally, Applicants respectfully thank the Examiner for considering the documents submitted together with the Information Disclosure Statements filed in the present application on July 6, 2005, and September 21, 2001, by the return of the initialed and signed PTO-1449 Forms accompanying the above-noted Information Disclosure Statements.

In the outstanding Official Action, the Examiner objected to the drawings as failing to comply with 37 C.F.R. § 1.84(p)(5). The Examiner indicated that several reference numerals mentioned in the written description are not illustrated in the drawings.

In response, by the present Response, Applicants have amended the specification to change the references therein from the non-illustrated features to

properly illustrated features. Accordingly, Applicants respectfully traverse the objection to the drawings and request reconsideration and withdrawal thereof.

In the outstanding Official Action, the Examiner objected to the disclosure because of a number of enumerated informalities. In particular, the Examiner noted informalities in various of the reference numerals illustrated in Figures 2, 5 and 10.

In response, Applicants have amended the specification to correct various reference numerals included therein so as to be more fully consistent with the drawings and with the Examiner's understanding of the invention. In particular, the Examiner's suggested changes have been made. The Examiner is thanked for bringing these matters to their attention so that they could be corrected. In view of the above amendments to the specification, Applicants respectfully traverse the objection to the disclosure and respectfully request reconsideration and withdrawal thereof.

In the outstanding Official Action, the Examiner objected to claim 6 because of a language informality. In view of the cancellation of claim 6 and the elimination of the noted informality from any of the presently pending claims, it is respectfully submitted that the objection to claim 6 has been rendered moot.

In the outstanding Official Action, the Examiner rejected claim 7 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner asserted that the claim fails to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

By the present response, Applicants have canceled claim 7 and have eliminated the relative term previously contained therein from the presently pending claims. Accordingly, it is respectfully submitted that the rejection of claim 7 has been rendered

moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection and rejection of various claims based on any language informalities thereof.

In the outstanding Official Action, the Examiner rejected claims 1, 4, 7 and 10 under 35 U.S.C. § 102(e) as being anticipated by HAARTSEN (U.S. Patent No. 6,850,740). Claims 2, 3 and 11 were rejected under 35 U.S.C. § 103(a) as unpatentable over HAARTSEN in view of DECKER (EP 0 771 092). Claims 5 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over HAARTSEN in view of DECKER and further in view of KLEIN (U.S. Patent No. 6,804,211) and JOE ("An Adaptive Hybrid ARQ Scheme with Concatenated FEC Codes for Wireless ATM"). Claim 6 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over HAARTSEN in view of STACEY (U.S. Patent No. 6,434,154).

Finally, claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over HAARTSEN in view of ROHANI (U.S. Patent No. 5,390,166).

Applicants respectfully traverse each of the above-noted rejections and submits that they are inappropriate, particularly when considered with respect to the presently pending claims in the present application. In this regard, Applicants note that the presently submitted claims have been made in order to more clearly and distinctly define the features of Applicants' invention. The claims have not been made in view of the prior art and should thus not give rise to any prosecution history estoppel.

Applicants' invention, as defined e.g., in the embodiment of claim 1, is directed to a transmitting apparatus that includes a coder that is configured to transmit data, a processor and a transmitter. The processor is configured to divide the data encoded by

the coder into first data and second data. The first data includes data that is demodulated as decoding data by a receiving apparatus that decodes received data. The second data includes data that is output with the first data as the decoding data by the receiving apparatus upon fulfillment of a predetermined condition. The transmitter is configured to transmit the first data and the second data. Applicants' invention is further directed to a transmitting apparatus including a coder, a partial retransmission processor and a transmitter, as defined e.g., in the embodiment of claim 25. Further, Applicants' invention is directed to a transmitting apparatus that includes a modulator, a memory, a partial retransmission processor and a transmitter as defined e.g., in the embodiment of claim 33.

Additionally, Applicants' invention, as defined e.g., in the embodiment of claim 43, is directed to a receiving apparatus which includes a receiver, a channel decoder and a reception success judger. The receiver is configured to receive predetermined data and other data. The predetermined data is transmitted in a main burst structure, while the other data is transmitted in a sub burst structure that is different from the main burst structure. The channel decoder is configured to detect whether or not data received by the receiver contains an error, by decoding data received by the receiver. The reception success judger is configured to determine whether or not to output the predetermined data and the other data decoded by the channel decoder as decoding data based on an error-detection result of the predetermined data. Applicants' invention is further directed to a transmitting apparatus that includes a modulator, a partial retransmission processor and a transmitter as defined e.g., in the embodiment of claim

47. Finally, Applicants' invention is directed to a transmitting apparatus that includes a coder, a processor and a transmitter as defined e.g., in the embodiment of claim 48.

It is respectfully submitted that the combination of features recited in each of Applicants' independent claims and certainly in each of Applicants' dependent claims, is not taught, disclosed nor rendered obvious by any proper combination of references applied by the Examiner thereagainst. Accordingly, Applicants respectfully request reconsideration and withdrawal of each of the outstanding rejections together with an indication of allowability of all the claims pending in the present application. Such action is respectfully requested and is now believed to be appropriate and proper.

HAARTSEN is directed to time and frequency diversity in FH/TDD systems. HAARTSEN discloses a method and apparatus for radio communication which uses frequency and time diversity oriented spectrum modulation including adding an additional link depending on interference characteristics.

HAARTSEN discloses transmitting first data which is data demodulated in a receiving apparatus and second data using different time slots. HAARTSEN further teaches combining or selecting the first data and the second data to achieve a diversity effect.

However, Applicants respectfully submit that HAARTSEN does not disclose the various claimed combinations of features of Applicants' invention as recited in the various claims now pending herein. In particular, HAARTSEN does not disclose a processor that divides decoded data into first data and second data with the second data being data that is output with the first data as decoding data by a receiving

apparatus upon fulfillment of a predetermined condition as recited, e.g. in Applicants' claim 12.

HAARTSEN also does not disclose the combination of features recited in Applicant's claims including, *inter alia*, a processor that divides encoded data into first divided data and second divided data with the second divided data comprising data used with the first divided data in decoding processing in a receiving apparatus when the encoded data contains an error, as recited in Applicants' claim 48.

Nor does HAARTSEN disclose, *inter alia*, a partial retransmission processor that extracts predetermined data from data encoded by the coder, the predetermined data comprising a portion of data output as decoding data from a receiving apparatus that decodes received data upon fulfillment of a predetermined condition, as recited in independent claim 25.

Additionally, HAARTSEN does not disclose, *inter alia*, a partial retransmission processor configured to extract data from predetermined data wherein the extracted data comprises a portion of the data that is output with the predetermined data as the demodulated data by the receiving apparatus upon fulfillment of a predetermined condition, in the combination of Applicants' claim 33.

Nor does HAARTSEN disclose, *inter alia*, a partial retransmission processor that extracts data from the transmitting data M-ary modulated by the modulator, the extracted data comprising a portion of data that is used with the transmitting data in demodulating processing in a receiving apparatus that receives an M-ary modulated signal when the transmitting data contains an error, as recited in Applicants' claim 47.

According to the teachings of HAARTSEN, the additional data (e.g., the second data) is the same as the previously transmitted data (i.e., the first data). In this regard, at column 5, lines 5-7, HAARTSEN discloses that a second link is established, which conveys the same information as the first link, delayed by a fixed delay. The extra (i.e., second) link is requested by the unit that experiences quality problems in its receiver. Similarly, at column 7, lines 15-16, HAARTSEN discloses that a second link may be established and may carry the same data from packets 422, 432 and 442 but may be delayed by, for example, four time slots as shown in Figure 5B.

Accordingly, it is apparent that in HAARTSEN the additional data is the same as the previously transmitted data. In direct contrast to the above, and as apparent in the various recitations of Applicants' independent claims 12, 25, 33, 43, 47 and 48, Applicants do not simply transmit the same data through two different links. Rather, the data transmitted is different data, as recited in the various claims.

Accordingly, Applicants respectfully request reconsideration and withdrawal of each of the outstanding rejections together with an indication of the allowability of all claims pending in the present application, in due course. Such action is respectfully requested and is now believed to be appropriate and proper.

Applicants further note the disclosures of the various secondary references relied upon by the Examiner. However, since neither of these references can overcome and supply the deficiencies of the primary relied-upon HAARTSEN reference, it is respectfully submitted that no proper combination of the cited references can render obvious the combination of features recited in each of Applicants' claims.

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Additionally, Applicants have submitted various dependent claims. These dependent claims are submitted to be allowable based on their own recitations as well as based upon the recitations of the respective independent claims from which they depend, for reasons at least in accordance with the reasons set forth hereinabove. Accordingly, Applicants respectfully request reconsideration and withdrawal of each of the outstanding rejections together with an indication of the allowability of the claims presented.

SUMMARY AND CONCLUSION

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

Applicants have amended the specification to eliminate the Examiner's objection to the drawings as well as to the written description. Applicants have further canceled all the pending claims and submitted a new set of claims for consideration by the Examiner.

With respect to the new set of claims, Applicants have discussed the disclosures of the references applied by the Examiner and have pointed out their shortcomings and deficiencies thereof. In particular, Applicants have set forth the recitations of the various claims and have noted the deficiencies of the reference cited by the Examiner thereagainst. Accordingly, Applicants have provided a clear evidentiary basis for the patentability of all the claims in the present application and respectfully request and indication to such effect in due course.

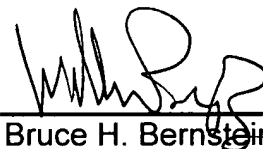
Any amendments to the claims which have been made in the amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

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Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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